

## **California Weather-Hydro Conditions during November 2007**

As of December 1, Water Year 2008 (October 1, 2007-September 30, 2008) statewide hydrologic conditions were as follows: precipitation, 65% of average to date; runoff, 50% of average to date; and reservoir storage, 85% of average for the date.

In general, November was a dry month for California, except for the far north coast, which had near average precipitation. At the end of the month, an unusually strong subtropical low brought locally heavy rains to the southern portion of the State. Despite parts of Southern California receiving significantly above average rainfall during November, drought conditions persist across the region. Temperatures were generally above average during November, except for the coastal regions. During the first week of December, several storms moved across California, bringing significant rain and snow to the Sierra. These storms increased soil moisture of the State's watersheds, but provided little runoff for the major water supply reservoirs.

Since October 1, precipitation has been about 50% of average in the Sacramento River Region, about 40% of average in the San Joaquin River Region, and about 30% of average in the Tulare Lake Region. On December 10, the Northern Sierra 8-Station Index had a seasonal total of 7.1", which is about 59% of the seasonal average to date and about 14% of average for an entire Water Year (50.0"). The Water Year 2007 October through November seasonal total of 4.6" for the 8-Stations is the 21st driest year out of 89 years of record.

November 2008 unimpaired runoff in the Sacramento River Region was about 42% of average. Sacramento River unimpaired runoff observed since October 1 through November 30, 2007 was about 0.8 million acre-feet (MAF), which is about 60% of average. On November 30, 2006, the observed Sacramento River unimpaired runoff through that date was about 1.1 MAF or about 76% of average. November unimpaired runoff in the San Joaquin River Region was about 15% of average. Cumulative San Joaquin River unimpaired runoff since October 1 is about 26% of average, compared to about 56% a year ago. The median forecasts of the Sacramento and San Joaquin Valley Water Year Type indexes are "Dry" and "Critical," respectively.

Selected Cities Precipitation Accumulation as of 11/30/2007 (National Weather Service Water Year: July through June)					
	Jul 1 to Date 2007 - 2008 (in inches)	% Avg	Jul 1 to Date 2006 - 2007 (in inches)	% Avg	% Avg Jul 1 to Jun 30 2007 - 2008
Eureka	8.90	98	8.12	89	23
Redding	4.76	71	4.14	62	14
Sacramento	1.97	58	1.28	38	10
San Francisco	2.71	74	1.97	54	13
Fresno	0.33	17	0.31	16	2
Bakersfield	0.47	44	0.31	29	7
Los Angeles	1.47	83	0.50	28	9
San Diego	0.46	26	0.96	55	4

Key Reservoir Storage (1,000 AF) as of 11/30/2007								
Reservoir	River	Storage	Avg Storage	% Average	Capacity	% Capacity	Flood Control Encroachment	Total Space Available
Trinity Lake	Trinity	1,365	1,611	85	2,448	56	---	1,083
Shasta Lake	Sacramento	1,732	2,774	62	4,552	38	-1,562	2,820
Lake Oroville	Feather	1,286	2,188	59	3,538	36	-1,877	2,252
New Bullards Bar Res	Yuba	549	523	105	966	57	-247	417
Folsom Lake	American	241	468	51	977	25	-336	736
New Melones Res	Stanislaus	1,435	1,316	109	2,420	59	-535	985
Don Pedro Res	Tuolumne	1,223	1,309	93	2,030	60	-467	807
Lake McClure	Merced	268	450	60	1,025	26	-406	757
Millerton Lake	San Joaquin	159	215	74	520	31	-276	361
Pine Flat Res	Kings	198	373	53	1,000	20	-482	802
Isabella	Kern	108	151	71	568	19	-62	460
San Luis Res	(Offstream)	1,022	1,237	83	2,039	50	---	1,017

The latest National Weather Service Climate Prediction Center (CPC) 90-Day long-range seasonal weather outlook (for December through February), issued November 15, suggests above average precipitation for Northern California (including the Pacific Northwest) and below average for Central and Southern California. Temperatures are expected to be above average for much of southern and southeastern California and near average for the rest of the State. The latest CPC long-range weather outlook for December, issued November 30, suggests above average temperatures for Central and Southern California, while Northern California is expected to have average temperatures. Average precipitation is expected for almost all California, except for the extreme north and southeast where slightly above average precipitation is expected.

The pattern of this year's long-range forecasts is influenced by the continuing development of moderate La Nina conditions (cooler than average sea-surface temperatures) across the tropical Pacific. Current conditions suggest that La Nina conditions may continue into next spring. La Nina events influence the position and strength of the jet stream over the Pacific Ocean, which in turn affects the winter precipitation and temperature patterns across the United States and other locations in the world. La Nina conditions can favor a wetter than average Pacific Northwest and a drier than average American Southwest. California sits in the transition zone with the northern mountains of the State potentially wetter than average, and the Central Valley and Southern California potentially drier than average. In addition, during La Nina years, weather in Northern California can be highly variable, with both wet and dry scenarios possible. Southern California has a more consistent tendency toward dryness, suggesting that drought conditions are likely to persist in that region and the American Southwest.